BEFORE THE DEPARTMENT OF DEFENSE

In re: Training of Air Force Special Operations Forces at Joint Base Lewis McChord Docket No. __

PETITION FOR ENFORCEMENT

Submitted to:

The Honorable Jonathan Woodson, M.D. Assistant Secretary of Defense for Health Affairs United States Department of Defense 1400 Defense Pentagon Washington, DC 20301 *E-mail: jonathan.woodson@ha.osd.mil*

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Date:

May 13, 2013

Reply to:

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Submitted by:

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1. Action Requested

The United States Air Force's scheduled use of live animals at Joint Base Lewis McChord in Tacoma, Wash., on May 13-14, 2013, in combat trauma training courses, and its failure to adopt superior human-based training methods, constitute a serious violation of Department of Defense (DoD) Instruction 3216.01, *Use of Animals in DoD Programs*. Thus, the Physicians Committee for Responsible Medicine (Physicians Committee) hereby requests that the Air Force and DoD immediately halt plans to use and kill live animals in the upcoming course and transition to readily available nonanimal training methods.

2. Summary of Animal-Based Training Exercise at Joint Base Lewis McChord

According to a United States Army solicitation posted on the Federal Business Opportunities website on May 8, 2013, a contractor will use and kill seven animals in a combat trauma training course on May 14. Pigs or goats are the animals used most often in these military training courses. The Statement of Work for this solicitation states that the contractor will provide training at Joint Base Lewis McChord over three two-day periods (May 13-14, May 28-29, and June 4-5, 2013), including a live animal-based section on the second day of each period. According to the Statement of Work, each course is intended for 35 medical personnel. Deployment International of Gig Harbor, Wash., is the expected vendor for this contract.

According to the Statement of Work, live animals will likely be subjected to:

- Limb amputation
- Limb fracture
- Burns
- Wounds resulting in severe bleeding
- Needles and tubes inserted into the chest cavity

The use of animals in similar U.S. military medical courses has been documented. For instance, an Army course is detailed in the Aug. 8, 2008, issue of the *San Antonio Express-News*. The reporter described the scene:

Two combat medics hold the rear leg of an unconscious goat stretched out on a blue sheet atop the nylon mesh of an Army litter. Instructor Armand Fermin places a tree trimmer over the joint in the leg, closes it, applies pressure, and a 'crack' echoes inside the dimly lit tent...

In a Nov. 2, 2006, *New York Times* article a Navy corpsman reported that he was charged with keeping an anesthetized pig alive for as long as possible after the animal was subjected to serious injuries, saying of the pig, "they shot him twice in the face with a 9-millimeter pistol, and then six times with an AK-47 and then twice with a 12-gauge shotgun. And then he was set on fire." According to the article, the corpsman kept the pig alive in this condition for 15 hours.

In June 2012, a DoD contractor was cited by the U.S. Department of Agriculture for violations of the federal Animal Welfare Act for improperly anesthetizing animals during a training course for Coast Guard personnel in Virginia Beach, Va., according to *Navy Times*.

3. Superior Nonanimal Training Methods

All of the procedures for which live animals will be used in the upcoming Air Force course can be taught using realistic human-based medical simulation methods.

The Cut Suit from San Diego-based Strategic Operations, Inc. was specifically designed for combat trauma training courses and replicates the experience of performing emergency medical procedures on a living trauma patient. Trainees can apply tourniquets, control severe bleeding, and manage collapsed lungs. This device can also teach arterial hemorrhage control of organs and extremities, surgical incisions to the thoracic and abdominal cavities, and suturing or stapling of organs and skin.

Compared to live animal-based training, the Cut Suit more closely replicates the experience of treating a wounded service member. The system allows for interaction with a live patient during the emergency assessment and treatment process. Furthermore, body armor, uniform clothing, and equipment can all be worn over the suit. Compared to an unconscious, anesthetized animal, these elements more closely replicate the emotional stresses of working on a wounded service member.

Additionally, simulators from Maryland-based Operative Experience, Inc. feature artificial tissues, including skin, bone, muscle, fascia, blood vessels, and nerves—all of which can be operated on. The company's point-of-injury simulators allow for control and management of high velocity gunshot wounds. The devices also allow trainees to amputate legs above and below the knee and control severe hemorrhaging.

Battlefield trauma expert Col. Mark Bowyer, M.D. (ret.), recently stated about Operative Experience's devices:

Frankly, this is as close to human tissue as anything I've ever seen...[T]these models are like nothing else out there...Combined with a curriculum, they have the capacity to revolutionize training.

Furthermore, the shortcomings of using goats for combat trauma training are further supported by a 2006 paper by Vance Y. Sohn, M.D., and colleagues, which analyzed the Tactical Combat Casualty Care course at Joint Base Lewis McChord's Madigan Army Medical Center. The paper stated that because "[t]he goat model is not ideal for venous access," many trainees were unable to properly secure intravenous (IV) access in the animals, causing some of the goats to suffer fatal hypovolemic shock and hypothermia. Because placing an IV is crucial to proper combat trauma training, this admission points out a glaring shortfall in the use of animals for this training.

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Other military courses demonstrate that expert training can be obtained without the use of animals. The Marine Corps in Okinawa has confirmed to the Physicians Committee that it exclusively "relies on lifelike, robotic mannequins" and "does not use live animals" to conduct combat trauma training courses. In addition, the Air Force's Center for Sustainment of Trauma and Readiness Skills courses use high-tech simulators and human cadavers instead of animals.

Lastly, a 2012 paper (Sergeev, et al.) by members of the Israel Defense Forces comparing the use of medical simulation to live animal-based training for three critical battlefield medical procedures—cricothyroidotomy, needle decompression, and chest tube placement—examined whether these training methods built self-confidence among military advanced life support providers. The authors concluded that "self-confidence levels in procedure performance are positively associated with experience gained from [simulators]..." The authors further concluded: "We were not able to demonstrate a clear benefit of an animal model in increasing self-confidence."

4. Scheduled Animal Use is Violation of DoD Instruction

If the Joint Base Lewis McChord course moves forward, it will constitute a violation of DoD Instruction 3216.01, *Use of Animals in DoD Programs*. The instruction mandates that "*methods other than animal use* and alternatives to animal use (i.e., methods to refine, reduce, or replace the use of animals) shall be considered and used whenever possible to attain the objectives of RDT&E or training if such alternative methods produce scientifically or educationally valid or equivalent results." [italics added] As demonstrated above, advanced nonanimal training methods can provide superior training to medics, yet the Air Force is not employing these alternative methods to replace the use of live animals.

5. Conclusion

The scheduled unnecessary use and killing of animals in a United States Air Force combat trauma training course constitutes a serious violation of the DoD instruction regarding animal use, due to the availability of superior human-based training methods. To prevent this noncompliance the Air Force and DoD must: 1) immediately halt the use of animals in the course scheduled for May 13-14, May 28-29, and June 4-5, 2013, at Joint Base Lewis McChord, and 2) implement superior nonanimal training methods.